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ABSTRACT

A doctoral seminar for students in educational administration used problem based learning (PBL) with student consultant teams and later evaluated the results of the approach. PBL involves group work in which students address and solve realistic or actual professional problems. The instructor prepares detailed hypothetical problems for the students and facilitates the work of student groups. Fourteen students took this educational personnel administration seminar. Students in groups of 3 or 4 were assigned actual personnel problems provided by two local superintendents that addressed important issues of professional practice and lent themselves to preparation of a written project product: a formal report with specific recommendations. Teams conducted client interviews, reviewed written materials provided by the schools involved, and reviewed a wide variety of other resources. Teams met four times in class to work on their projects and other times outside class. Teams presented their written reports at the last class. When students evaluated the course 11 students assigned the course an "A" and three a "B". Course evaluation forms are appended. (JB)

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PROBLEM BASED LEARNING USING STUDENT CONSULTANT TEAMS

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In 1992 Edwin M. Bridges published Problem Based Learning for Administrators (Bridges, 1992.) The book introduced and reported positive results from the use of a new and innovative instructional approach in the preparation of educational administrators -- problem based learning (PBL.) According to Bridges, this approach was inspired by field based training techniques being used in the medical profession. In PBL, the primary vehicle for promoting student learning is group work in which students address and solve realistic professional problems. The instructor is responsible for preparing detailed hypothetical problems for the students and for facilitating the work of the student groups. Early results from others also suggest that PBL shows promise as an instructional method in the preparation of educational administrators (Martin, Murphy, & Muth, 1993.)

The purpose of this paper is to describe and evaluate the results of an effort to extend PBL to the solution of actual administrative problems using student consultant teams. The

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realism and complexity of the problems addressed using this approach are believed to provide a rich learning environment and to promote the successful transfer of student learning from the classroom to the world of daily administrative practice. The problems that are studied come directly from the world of practice. This instructional approach calls upon students to integrate their academic skills with the administrative savvy they have acquired through previous experience and to apply this integration to the solution of actual administrative problems.

PBL using student consultant teams gives university faculty members intimate contact with real-world problems of administrative practice and provides school systems competent and cost-free technical support. PBL using student consultant teams promises to improve the quality and credibility of university programs in educational administration, strengthen aspects of day-to-day school operations, and contribute to understanding, cooperation, and mutual benefit in the relations between schools and universities.

It is hoped that this paper will contribute to and extend the current discussion of the use of PBL in the preparation of educational administrators. The instructional approach that is described in this paper and the data that are presented should be especially useful to university faculty members who are interested in considering, testing, adapting, or evaluating the promising direction that Bridges has set.

The specific context for evaluating PBL using student consultant teams was a doctoral seminar in educational personnel administration taught to 14 students of educational leadership during the winter quarter of 1993. The course was presented in ten meetings of two hours and forty minutes in length. The course was offered by Youngstown State University (YSU), a metropolitan university that enrolls approximately 15,000 students residing primarily in northeastern Ohio and western Pennsylvania. YSU is accredited by the National Council for Accreditation of Teacher Education, the North Central Association of Colleges and Secondary Schools, the Department of Education of the State of Ohio, and other agencies.

The primary instructional objectives of the seminar were as follows:

1. To develop the student's ability to apply current personnel administration theory, research, and best practice to the opportunities and problems of instructional leadership and daily administrative practice in schools and school systems,
2. To develop the student's skill in analyzing administrative practice from the point of view of an "outside expert," and
3. To develop the student's skill in acting as a member of an expert team in analyzing administrative practices and developing institutional strategies for solving problems and obtaining the best possible performance

from personnel.

Certain secondary course objectives were also addressed: to develop the student's insights into the use of outside consultants, to develop the student's willingness to accept personal responsibility for assuming the role of expert, and to provide the student the experience of participating in problem based learning using student consultant teams.

The subjects in the study were a select group of practicing administrators who had been admitted into the initial, Fall 1994, cohort of a new Doctor of Education (Ed.D.) program in Educational Leadership, the first doctoral program at YSU. All of the students had completed a master's-level prerequisite course in personnel administration, and all possessed at least two years of administrative experience. Demographically, the group consisted of one black male, seven white females, and six white males.

The first meeting of the course explained the course syllabus and noted that the seminar would consist of two halves. The first half expanded upon the students' previous academic and practical knowledge by exposing them to the best and most recent theory and research in personnel administration. The second half of the course gave the students the opportunity to apply this knowledge, in consultant teams, to real problems of administrative practice. The first meeting concluded with a presentation by the instructor on the role and functions of the consultant in personnel administration.

The students were required to read and discuss the literature of human resource management collected in Frank J. Landy's textbook Readings in Industrial and Organizational Psychology (Landy, 1986.) The discussion of these readings was led by the instructor. To update these materials, each student was required to prepare a seminar presentation at which she or he distributed and led the discussion of two summaries of recent articles or book chapters on assigned topics in the text. The discussion of the assigned theory and research materials occupied four class meetings.

The students were then assigned to one of four consultant teams to work on projects selected by the instructor. One team consisted of two white females and two white males; the second consisted of one white female and two white males; the third team consisted of two white females and two white males; the fourth consisted of one black male and two white females. In all but one case, one member of each team had presented an update on a topic related to the assigned project. No students were assigned to projects drawn from their own school systems. Project topics were chosen to address important problems of professional practice and to lend themselves to the preparation of a written project product. This written product was presented in a formal report that included specific recommendations for dealing with the assigned problem. The project reports were provided to participating school officials and to all class members. Confidential treatment of all project-related information was

required.

The assigned projects were provided by the superintendents of two public school districts. The instructor selected these individuals from a pool of interested administrators because of their openness to new ideas, their desire for student consultant services, and the challenge and rewards that their specific projects offered. The superintendents were informed of the purposes of the seminar, the level of qualifications of the students, and the role of the instructor as facilitator. The projects provided by these superintendents were as follows:

1. A job analysis of the work of the building administrators in one school district,
2. The development of a series of devices to be used for the initial screening of applicants for certain classified positions,
3. A review of one school district's administrator evaluation system, and
4. The development of recommendations for the reorganization of one school district's elementary teaching staff.

The superintendents attended one class meeting midway through the term. Relying in part on guidelines presented earlier by the instructor, the teams conducted client interviews to determine the scope, needs, specifications, history, situational demands and essential facts relevant to their assigned project. Teams criticized one another's interviews.

The superintendents provided written materials to the teams during the interviews and in response to later requests. All teams also held follow-up discussions with the superintendents.

The teams had access to a variety of reference resources: the textbook readings, the student presentations, extensive scholarly resources in the university library, previous study in personnel administration, personal and professional experience, and documents describing administrative practices in the region. Each team was expected to make its own decisions concerning the roles of members, the division of labor within the team, and the work procedures to be followed. The teams met four times during scheduled class hours. The instructor circulated among the teams, supporting teamwork, monitoring and promoting team progress, and modeling the role of outside expert. All teams also met outside class. The final meeting of the course consisted of the presentation and discussion of the team reports.

Three written sources of information were used to evaluate PBL using student consultant teams. These sources were as follows:

1. A form for the student evaluation of teaching adopted and administered by the university (copy not included for copyright reasons),
2. A student survey consisting of 23 items designed by the instructor to provide quantitative and qualitative information concerning the course (Appendix A presents these items), and

3. A superintendent survey consisting of 12 items designed by the instructor to provide quantitative and qualitative information concerning the work of the student consultant teams (copy not included due to space limitations).

Both student forms were completed anonymously. The university evaluation form asked for "Strongly Agree" to "Strongly Disagree" ratings on a five-point rating scale. Both the student and superintendent surveys asked for "A" to "F" ratings on a four-point scale and solicited descriptive or explanatory comments concerning the ratings given. In addition, the survey forms also requested narrative information. The most important limitation of the data collected in this study lies in the size of the sample from which data were collected, viz., 14 students and two superintendents. The precise means and medians reported below should be interpreted and generalized cautiously.

The data collected using the university form for student evaluation of teaching indicated overall support for the approach used in the course. Eleven of the 14 students indicated that they either strongly agreed or agreed that the course was "among the best I have taken" (M=4.1, Md.=4.0.)

Table 1, which appears on the following page, presents the quantitative data that were obtained using the 23-item student survey.

Table 1

Quantitative Results of Student Survey

Item	Ratings A	B	C	D	F	Mean	Median
General Items							
1. Appropriateness of application objective	8	6	0	0	0	3.57	4.0
2. Success of course on above objective	8	4	2	0	0	3.43	4.0
3. Appropriateness of "expert" objective	10	4	0	0	0	3.71	4.0
4. Success of course on above objective	10	4	0	0	0	3.71	4.0
5. Appropriateness of teamwork objective	12	2	0	0	0	3.86	4.0
6. Success of course on above objective	11	3	0	0	0	3.79	4.0
7. Overall success of course on objectives	11	3	0	0	0	3.79	4.0
Course Activities							
8. Value of readings*	0	4.5	8	1.5	0	2.21	2.0
9. Value of presentations	8	6	0	0	0	3.57	4.0
10. Value of discussions*	11.5	2.5	0	0	0	3.82	4.0
11. Value of team projects	13	1	0	0	0	3.93	4.0
12. Value of team reports	9	4	0	0	0	3.69	4.0
Specific Aspects of Assigned Team Projects							
13. Quality of team topic*	10.5	3.5	0	0	0	3.75	4.0
14. Quality of client information	4	6	3	1	0	2.93	3.0
15. Quality of direction by instructor	11	3	0	0	0	3.79	4.0
16. Quality of resources	4	8	2	0	0	3.14	3.0
17. Quality of division of labor within team	10	1	3	0	0	3.50	4.0
18. Quality of work procedures in team	10	3	1	0	0	3.64	4.0
19. Quality of teamwork	11	2	1	0	0	3.71	4.0

* Decimal values reflect ratings across scales, e.g., A-B.

On the student survey, 11 students assigned the course an "A" rating in achieving its three primary instructional objectives, and three students assigned the course a "B" rating. The data indicated that students found the objective of developing skill in acting as a member of an expert team to be the most appropriate to their needs, and they found the course to be the most successful in achieving this objective.

Regarding the course activities, the data indicated that students found the team projects to be of the greatest value. The quality of team interaction was the subject of the most positive comments. By a wide margin, the students found the textbook readings to be of the least value. Student comments were highly critical of the volume and complexity of the readings. The seminar presentations were found to be of the next least value. The team project reports were assigned a middle ground.

Regarding specific aspects of the team projects, the students assigned the highest ratings, respectively, to the quality of the direction provided by the instructor, the quality of their own assigned project topic, the quality of the teamwork in their group, the quality of the work procedures followed by their team, and the division of labor within their team. Lower, although not extremely low, ratings were assigned to the quality of the resources to support the team projects and the quality of the information and materials provided by the superintendents.

The narrative evaluations of the course indicated that the students would not want to change the use of team projects the next time the course is taught. They would, however, want to change the text that was used. Some changes were also suggested in the procedure for the team projects, including allowing more time for the team projects, the possible use of two smaller projects, and the possible use of one whole-class project.

Only one of the two superintendents returned the superintendent survey, in spite of repeated follow-up efforts. Therefore, only partial superintendent data can be reported. On the job analysis project, the superintendent assigned the highest ratings ("A" and "B+", respectively) to the team's collection and use of appropriate data ("very thorough approach") and to their understanding of the specific context of the project. A narrative comment indicated that what the superintendent liked best about the team's work was the "very professional manuscript" which they developed. He liked least that "some areas of the job description were unclear to the reader." He stated that he planned to make practical use of the team's report: "Board policy will reflect this project."

On the applicant screening project, the ratings indicated that the superintendent was uniformly impressed with all of the the team's report (all "A" ratings.) A narrative comment indicated what the superintendent liked best: "The collection of this vast amount of material would not have occurred without their work. These data will be shared with other schools." He

stated that he planned to make practical use of the team's report: "If I can gain acceptance by the local bargaining unit, it [the screening process] will be implemented immediately."

The data presented above suggest that PBL using student consultant teams can provide experiences which students view as rewarding. This approach can promote the objectives of developing the student's ability to apply current personnel administration theory, research, and best practice to instructional leadership and daily administrative practice, the student's skill in analyzing administrative practice as an expert, and the student's skill in acting as a member of an expert team. PBL using student consultant teams was the most successful in promoting the last of these objectives.

The course activities which students found most valuable were the team projects which they were assigned and the interaction that took place within their teams. Students did not especially value the assigned readings and update presentations. The aspects of the team projects which students found of highest quality were the direction provided by the instructor, their assigned project topics, and the teamwork, work procedures, and division of labor within their groups. It is clear that the team projects provided competent technical support to the superintendent from whom information was available and enabled him to plan positive action with respect to two areas of school district operations.

The results of this research support the continued application of PBL using student consultant teams in this seminar course. Both the learning and product outcomes justify this conclusion. Two changes, however, are warranted: fewer background readings and updates should be assigned, and more time should be dedicated to the team projects. The author has continued his use and study of PBL using student consultant teams. A follow-up evaluation is currently in preparation. Related studies are recommended.

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Bridges, E.M. (1992). Problem based learning for administrators. Eugene: ERIC Clearinghouse on Educational Management, University of Oregon.

Landy, F. J. (1986). Readings in industrial and organizational psychology. Pacific Grove, Ca: Books/Cole Publishing Company.

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APPENDIX A

EDADM 1135: SEMINAR IN PERSONNEL ADMINISTRATION
COURSE EVALUATION, WINTER QUARTER 1993

INSTRUCTIONS

This anonymous evaluation form asks for detailed information concerning this course. The results will be used for instructional planning and research purposes. For the items in Parts A, B, and C of the form you are asked to provide a rating and any descriptive or explanatory comments you may wish to offer. Please rate these items on an "A" to "F" grading scale. Offer comments in complete sentences. If additional space is needed, use the back of the sheet. The two data formats will permit both quantitative and qualitative analysis of responses. Part D of the form asks for recommendations concerning how the course should be taught in the future.

PART A: GENERAL

1. Appropriateness of the course objective of developing your ability to apply current personnel administration theory, research, and best practice to the opportunities and problems of instructional leadership and daily administrative practice in schools and school systems.

2. Success of the course in achieving the above objective.

3. Appropriateness of the course objective of developing your skill in analyzing practice from the point of view of an "outside expert," including problem definition, problem analysis, data collection, data analysis, and the formulation of recommendations for action.

4. Success of the course in achieving the above objective.

5. Appropriateness of the course objective of developing your skill in acting as a member of an expert team in analyzing administrative practices and developing institutional strategies for solving problems and obtaining the best possible performance from personnel.

6. Success of the course in achieving the above objective.

7. Overall success of the course in achieving the course objectives.

PART B: COURSE ACTIVITIES

8. Value of readings from textbook.

9. Value of seminar presentations.

10. Value of class discussions.

11. Value of team projects.

12. Value of team project reports.

PART C: SPECIFIC ASPECTS OF ASSIGNED TEAM PROJECT

13. Quality of project topic assigned to your team.

14. Quality of information and materials provided by client.

15. Quality of direction on team project provided by instructor.

16. Quality of resources available to support team project.

17. Quality of division of labor within your team.

18. Quality of work procedures followed by your team.

19. Quality of teamwork in your group.

PART D: NARRATIVE EVALUATION OF COURSE

20. Please describe the features of the course that you would not want changed the next time it is taught.

21. Please describe the features of the course that you would want changed the next time it is taught.

22. What additional recommendations can you offer to improve the course?

23. What additional information do you wish to provide concerning the course?